

AP20 Rec'd PCT/PTO 13 APR 2006

SEQUENCE LISTINGCDRs For FR1-H7 Amino Acid Sequences

VH (human heavy chain subclass I)

CDR1 SEQ ID NO:1	DYYMH
CDR2 SEQ ID NO:2	LVDPEDGETIYAEEKFQG
CDR3 SEQ ID NO:3	DDYMDV

VL (human kappa light chain subgroup III)

CDR1 SEQ ID NO:4	RASQSVSGSALA
CDR2 SEQ ID NO:5	DASSRAT
CDR3 SEQ ID NO:6	QQYGSSPLT

Variable Region of FR1-H7 Heavy Chain

Amino Acid Sequence

SEQ ID NO:7

MAEVQLVQSGAEVKKPGASVKVSCKVSGYTFTDYYMHWVQQAPGKGLEWMGLVDPEDGETIYAEEKFQGRVTITADTSTDTAYMELSSLRSEDTAVYYCARDDYMDVWGKGTIVTVSSASTKGP

Variable Region of FR1-H7 Light Chain

Amino Acid Sequence

SEQ ID NO:8

LETTLTQSPDTLSLSPGEGATLSCRASQSVGSALAWYQQKPGQAPRLLIYDASSRATGV
PDRFSGSGSGADFSLTISRLEPEDFAVYSCQQYGSPLTFGPGTKVDVKRTVAAPSVFIF
PPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDCDRs For FR1-A1 Amino Acid Sequences

VH (human heavy chain subclass I)

CDR1 SEQ ID NO:9	GYYMH
CDR2 SEQ ID NO:10	RIIPILGIANYAQKFQG
CDR3 SEQ ID NO:11	GGDLGGMDV

VL (human kappa light chain subgroup III)

CDR1 SEQ ID NO:12	RSSQSLRHSNGNYLD
CDR2 SEQ ID NO:13	LASNRAS
CDR3 SEQ ID NO:14	MQALQIPPT

Variable Region of FR1-A1 Heavy Chain

Amino Acid Sequences

SEQ ID NO:15.

MAQVQLVQSGAEVKKPGSSVKVSCKASGQTFTGYYMHWVRQAPGQGLEWMGRIIPILGIA
NYAQKFQGRVTITADKS TSTAYMELSSLRSEDTAVYYCARGGDLGGMDVWGQG

Variable Region of FR1-A1 Light Chain

Amino Acid Sequences

SEQ ID NO:16LEI VLTQSPPLSLPVTGPGE PASI CRSSQSLRHSNGNYLDWYLQKPGQSPQLLIYLASNR
ASGV PDRFSGSGSGT DFTL KISRVE AEDVGVYYCMQALQI PPTFGPGTKVDIKRTVAACDRs For FR1-4H Amino Acid Sequences

Variable Heavy Chain

CDR1 SEQ ID NO:17	SYWWS
CDR2 SEQ ID NO:18	YIYYSGSTNPNPSLKS
CDR3 SEQ ID NO:19	EYYYDSSGYYFYAFDI

Variable Light Chain]

CDR1 SEQ ID NO:20	SGSSSNIGSNVY
CDR2 SEQ ID NO:21	RNNQRPS
CDR3 SEQ ID NO:22	AAWDDSLSGWV

Variable Region Heavy Chain FR1-4H

Amino Acid Sequences

SEQ ID NO:23

QVQLVEFGPGLVKPSETLSLTCTVSGGSISYYWSWI RQPPGKGLEWIGY	50
IYYSGSTNPNPSLKSRAV ISVDTSKNQFSLKLSSVTAADTAVYYCAREYY	100
YDS SGYYFYAFDIWGQGTTVTVSS	124

Variable Region Light Chain

Amino Acid Sequence

SEQ ID NO:24

LPVLTQPPSASGTPGQRVSISCSGSSNIGSNVYWYQQLPGTAPKLLIF	50
RNNQRPSGPDRFSGSKSGTSASLAISGLRSEDEADYYCAAWDDSLSGWV	100
FGGGTAKLTVLG	111

CDRs For FR1-H7 Nucleic Acid Sequences

VH (human heavy chain subclass I)

CDR1 SEQ ID NO:25	GA CTA TAC ATGCAC
CDR2 SEQ ID NO:26	CTTGTGATCCTGAAGATGGTGAACAA TCTACGCAGA
GAAGTTCCAGGGC	
CDR3 SEQ ID NO:27	GATGACTACATGGACGTC

VL (human kappa light chain subgroup III)

CDR1 SEQ ID NO:28	AGGGCCAGTCAGAGTGTAGCGGCAGTGC GTTGGCC
CDR2 SEQ ID NO:29	GATGCATCCAGTAGGGCCACT
CDR3 SEQ ID NO:30	CAGCAATATGGTAGCTCACCTCTCACT

Variable Region of FR1-H7 Heavy Chain DNA Sequence**SEQ ID NO:31**

ATGGCCGAGGTGCAGCTGGTCAGTCTGGGCTGAGGTGAAGAAGCCTGGGCCTCAGTG
 AAGGTTCTGCAAGGTTCTGGATACACCTCACCGACTACTACATGCACTGGTGCAA
 CAGGCCCTGGAAAAGGGCTTGAGTGGATGGACTTGTGATCCTGAAGATGGTAAACA
 ATCTACGCAGAGAAGTTCCAGGGCAGAGTCACCATAACCGCGGACACGTCTACAGACACA
 GCCTACATGGAGCTGAGCAGCCTGAGATCTGAGGACACGGCCGTATTACTGTGCGAGA
 GATGACTACATGGACGTCTGGGCAAAGGCACCCTGGTACCGTCTCAAGCGCCTCCACC
 AAGGGCCA

Variable Region of FR1-H7 Light Chain DNA Sequence

SEQ ID NO:32

CTTGAAACGACACTCACGCAGTCTCCAGACACCCTGTCTTGCTCCAGGAGAAGGAGCC
 ACCCTCTCTGTAGGGCCAGTCAGAGTGTAGCGGCAGTGCCTGGCCTGGTACCGCAG
 AACACCTGGCCAGGCTCCCAGACTCCTCATCTATGATGCATCCAGTAGGGCCACTGGCGTC
 CCAGACAGGTTCACTGGCAGTGGCTGGGCAGACTTCAGTCTCACCACAGCAGACTG
 GAGCCTGAAGATTTCAGTGTATTCTGTCAAGCAATATGGTAGCTCACCTCTCACTTTC
 GGCCCTGGGACCAAAGTGGATGTCAAACGAACTGTGGCTGCACCACATGTCTTCATCTTC
 CCGCCATCTGATGAGCAGTTGAAACTGGAACGTGCCTCTGTGTGCCTGCTGAATAAC
 TTCTATCCCAGAGAGGCCAAAGTACAGTGGAAAGGTGGATT

CDRs For FR1-A1 Nucleic Acid Sequences

VH (human heavy chain subclass I)

CDR1 **SEQ ID NO:33** GGCTACTATATGCAC

CDR2 **SEQ ID NO:34** AGGATCATCCCTATCCTGGTATAGCAAAC
 TACGCACAGAAGTTCCAGGGC

CDR3 **SEQ ID NO:35** GGAGGAGATCTGGCGGTATGGACGTC

VL (human kappa light chain subgroup III)

CDR1 **SEQ ID NO:36** AGGTCTAGTCAGAGCCTCCGGCATAGTAAT
 GGATACAACATTGGAT

CDR2 **SEQ ID NO:37** TTGGCTTCTAACGGGCCTCC

CDR3 **SEQ ID NO:38** ATGCAAGCTCTACAAATTCCCTCCGACT

Variable Region of FR1-A1 Heavy Chain

DNA Sequence

SEQ ID NO:39

ATGGCCCAGGTCCAGCTGGTCAGTCTGGGCTGAGGTGAAGAAGCCTGGTCCTCGGTG
 AAGGTCTCTGCAAGGTTCTGGATCGACCTCACCGCTACTATATGCACTGGTGCGA
 CAGGCCCTGGACAAGGGCTTGAGTGGATGGGAAGGATCATCCCTATCCTGGTATAGCA
 AACTACGCACAGAAGTTCCAGGGCAGAGTCACGATTACCGCGGACAAATCCACGAGCACA
 GCCTACATGGAGCTGAGCAGCCTGAGATCTGAGGACACGGCCGTGTACTACTGTGCGAGA
 GGAGGAGATCTGGCGGTATGGACGTCTGGGCCAAGGGA

Variable Region of FR1-A1 Light Chain

DNA Sequences

SEQ ID NO:40

CTTGAAATTGTGCTGACTCAGTCTCCACTCTCCCTGCCCGTCACCCCTGGAGAGGCCGGCC
 TCCATCTCCTGCAGGTCTAGTCAGAGCCTCCGGCATAGTAATGGATACAACATTGGAT
 TGGTACCTGCAGAACGCCAGGGCAGTCTCCACAGCTCCTGATCTATTGGCTTCTAACCGG
 GCCTCCGGGGTCCCTGACAGGTTCACTGGCAGTGGATCAGGCACAGATTTACACTGAAA
 ATCAGCAGACTGGAGGCTGAGGATGTTGGGTTTATTACTGCATGCAAGCTCTACAAATT
 CCTCCGACTTCGGCCCTGGGACCAAAGTGGATATCAAACGAACGTGGCTGCA

CDRs For FR1-4H Nucleic Acid Sequences

Variable Heavy Chain

CDR1 **SEQ ID NO:41** AGTTACTACTGGAGC

CDR2 **SEQ ID NO:42**

TATATCTATTACAGTGGGAGCACCAACTACAACCCCTCCCTCAAGAGT

CDR3 **SEQ ID NO:43**

GAGTATTACTATGATAGTAGTGGTTATTACTTTATGCTTTGATATC

Variable Light Chain]

CDR1 **SEQ ID NO:44** TCTGGAAGCAGCTCCAACATCGGAAGTAATTATGTATAAC

CDR2 **SEQ ID NO:45** AGGAATAATCAGCGGCCCTCA

CDR3 **SEQ ID NO:46** GCAGCATGGGATGACAGCCTGAGTGGTTGGGTG

Variable Region Heavy Chain FR1-4H

DNA Sequences

SEQ ID NO:47

CAGGTGCAGCTGGTGGAGTTGGCCAGGACTGGTGAAGCCTCGGAGAC	50
CCTGTCCCTCACCTGCACTGTCTCTGGTGGCTCCATCAGTAGTTACTACT	100
GGAGCTGGATCCGGCAGCCCCCAGGGAAGGGACTGGAGTGGATTGGGTAT	150
ATCTATTACAGTGGGAGCACCAACTACAACCCCTCCCTCAAGAGTCGAGT	200
CGCCATATCAGTAGACAQGTCCAAGAACCGAGTCTCCCTGAAGCTGAGCT	250
CTGTGACCGCCGCGGACACGGCCGTGTATTACTGTGCGAGAGAGTATTAC	300
TATGATAGTAGTGGTTATTACTTTATGCTTTGATATCTGGGGCCAAGG	350
GACCACGGTCACCGTCTCAAGC	372

Variable Region Light Chain

DNA Sequence

SEQ ID NO:48

CTGCCTGTGCTGACTCAGCCCCCTCAGCGTCTGGGACCCCCGGCAGAG	50
GGTCTCCATCTCTTGTGAAAGCAGCTCCAACATCGGAAGTAATTATG	100
TATACTGGTACCAAGCAGCTCCAGGAACGGCCCCAAACTCCTCATCTT	150
AGGAATAATCAGCGGCCCTCAGGGTCCCTGACCGATTCTGGCTCCAA	200
GTCTGGCACTTCAGCCTCCCTGGCCATCAGTGGCTCCGGTCCGAGGATG	250
AGGCTGATTATTACTGTGCAGCATGGGATGACAGCCTGAGTGGTTGGGTG	300
TTCGGCGGAGGGACCAAGCTGACCGTCCTAGGT	333